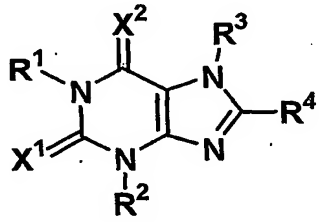
Claims

1. A method of treating an anxiety disorder selected from the group consisting of panic disorder, agoraphobia, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder, and specific phobia, comprising administering an effective amount of at least one adenosine A_{2A} receptor antagonist to a patient in need thereof.

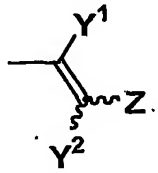
2. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.

3. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I):



(I)

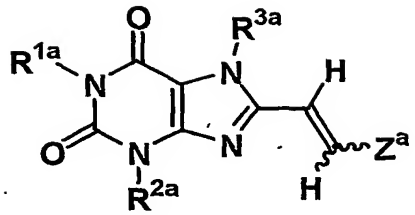
[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

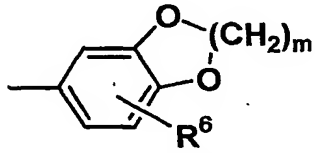
(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof.

4. The method of treating an anxiety disorder according to claim 1 wherein the A_{2A} receptor antagonist is a compound represented by formula (I-A):



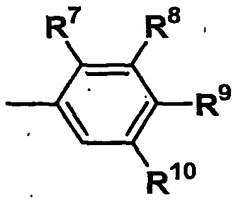
(I-A)

[wherein R^{1a} and R^{2a} independently represent methyl or ethyl; R^{3a} represents hydrogen or lower alkyl; and Z^a represents formula (I-ii)



(I-ii)

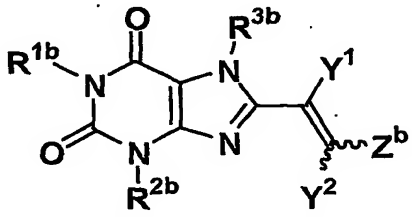
(in which R^6 represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3) or formula (I-iii)



(I-iii)

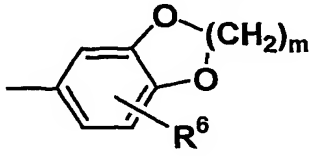
(in which at least one of R^7, R^8 and R^9 represents lower alkyl or lower alkoxy and the others represent hydrogen; R^{10} represents hydrogen or lower alkyl)], or a pharmaceutically acceptable salt thereof.

5. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I-B):



(I-B)

[wherein R^{1b} and R^{2b} independently represent hydrogen, propyl, butyl, lower alkenyl or lower alkynyl; R^{3b} represents hydrogen or lower alkyl; Z^b represents substituted or unsubstituted naphthyl, or formula (I-ii)

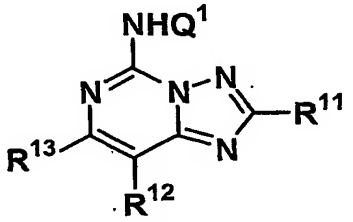


(I-ii)

(in which R^6 and m have the same meanings as defined above, respectively); and Y^1 and Y^2 have the same meanings as defined above, respectively], or a pharmaceutically acceptable salt thereof.

6. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine or a pharmaceutically acceptable salt thereof.

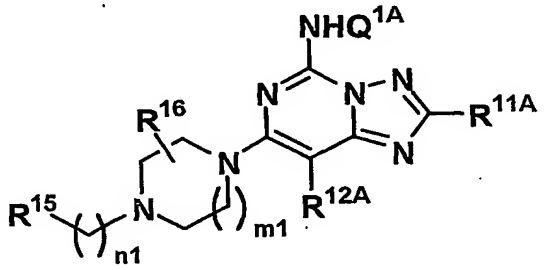
7. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (II):



(II)

[wherein R^{11} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; R^{12} represents hydrogen, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; R^{13} represents hydrogen, halogen or $-WR^{14}$ (in which W represents -O- or -S-; and R^{14} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and Q^1 represents hydrogen or 3,4-dimethoxybenzyl], or a pharmaceutically acceptable salt thereof.

8. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (III):

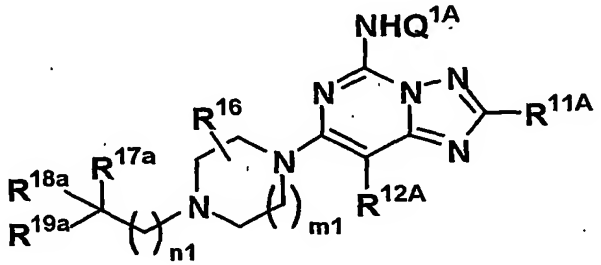


(III)

[wherein R^{11A} represents substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl; R^{12A} represents hydrogen, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or substituted or

unsubstituted heteroaryl; m1 and n1 are independently an integer of 0 to 4; Q^{1A} represents hydrogen or 3,4-dimethoxybenzyl; R^{15} represents hydrogen, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyalic group, or $-CR^{17}R^{18}R^{19}$ (in which R^{17}, R^{18} and R^{19} independently represent hydrogen, hydroxy, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyalic group; or R^{18} and R^{19} are combined together with an adjacent carbon atom to form a substituted or unsubstituted carbon ring); and R^{16} represents hydrogen, halogen, hydroxy, or substituted or unsubstituted lower alkyl], or a pharmaceutically acceptable salt thereof.

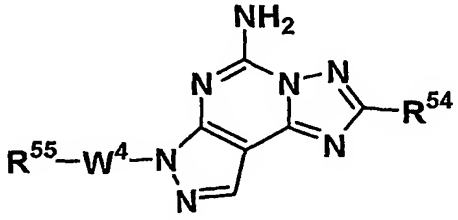
9. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (III-A):



(III-A)

(wherein Q^{1A}, R^{11A}, R^{12A}, R^{16}, m1 and n1 have the same meanings as defined above, respectively; R^{17a} represents hydroxy, hydroxyl-substituted lower alkyl, substituted or unsubstituted lower alkoxy, or imidazo[1,2-a]pyridyl; and R^{18a} and R^{19a} independently represent hydrogen, substituted or unsubstituted lower alkyl, or substituted or unsubstituted aryl; or R^{18a} and R^{19a} are combined together with an adjacent carbon atom to form a substituted or unsubstituted carbon ring), or a pharmaceutically acceptable salt thereof.

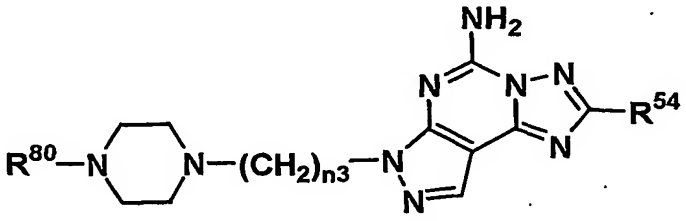
10. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (XII):



(XII)

(wherein R^{54} represents substituted or unsubstituted aryl, substituted or unsubstituted cycloalkenyl, or substituted or unsubstituted heteroaryl; W^4 represents a single bond or -C(=O)-; and R^{55} represents substituted or unsubstituted lower alkyl), or a pharmaceutically acceptable salt thereof.

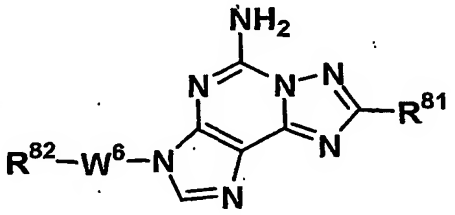
11. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (XII-A):



(XII-A)

(wherein R^{54} has the same meaning as defined above; n3 is an integer of 1 to 4; and R^{80} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or a pharmaceutically acceptable salt thereof.

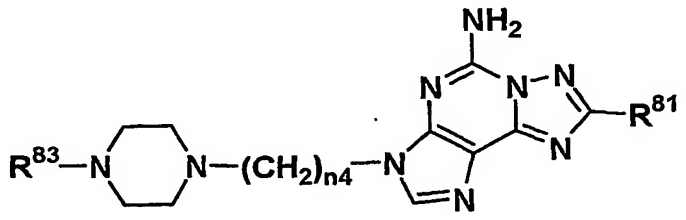
12. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (XVIII):



(XVIII)

(wherein R^{81} represents substituted or unsubstituted aryl, substituted or unsubstituted cycloalkenyl, or substituted or unsubstituted heteroaryl; W^6 represents a single bond or -C(=O)-; and R^{82} represents substituted or unsubstituted lower alkyl), or a pharmaceutically acceptable salt thereof.

13. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (XVIII-A):



(XVIII-A)

(wherein R^{81} has the same meaning as defined above; n4 is an integer of 1 to 4; and R^{83} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or a pharmaceutically acceptable salt thereof.

14. The method of treating an anxiety disorder according to any one of claims 1 to 13, wherein the anxiety disorder is panic disorder.

15. The method of treating an anxiety disorder according to any one of claims 1 to 13, wherein the anxiety disorder is agoraphobia.

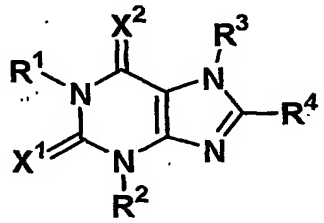
16. The method of treating an anxiety disorder according to any one of claims 1 to 13, wherein the anxiety disorder is obsessive-compulsive disorder.

17. The method of treating an anxiety disorder according to any one of claims 1 to 13, wherein the anxiety disorder is social phobia.

18. The method of treating an anxiety disorder according to any one of claims 1 to 13, wherein the anxiety disorder is post-traumatic stress disorder.

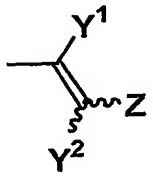
19. The method of treating an anxiety disorder according to any one of claims 1 to 13, wherein the anxiety disorder is specific phobia.

20. A method of treating an anxiety disorder, comprising administering an effective amount of a xanthine derivative represented by formula (I):



(I)

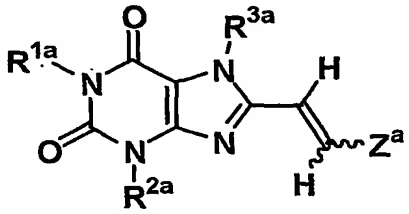
[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

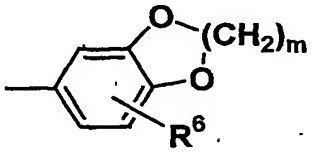
(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof.

21. The method of treating an anxiety disorder according to claim 20 wherein the xanthine derivative is a compound represented by formula (I-A):



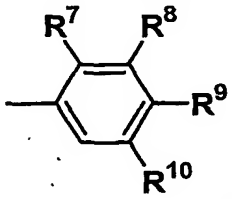
(I-A)

[wherein R^{1a} and R^{2a} independently represent methyl or ethyl; R^{3a} represents hydrogen or lower alkyl; and Z^a represents formula (I-ii)



(I-ii)

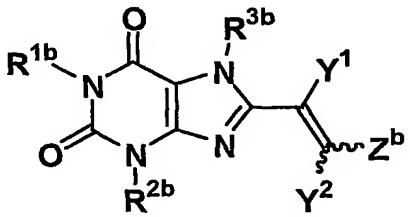
(in which R^6 represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3) or formula (I-iii)



(I-iii)

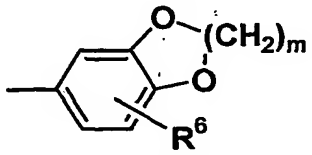
(in which at least one of R^7, R^8 and R^9 represents lower alkyl or lower alkoxy and the others represent hydrogen; R^{10} represents hydrogen or lower alkyl)], or a pharmaceutically acceptable salt thereof.

22. The method of treating an anxiety disorder according to claim 20 wherein the xanthine derivative is a compound represented by formula (I-B):



(I-B)

[wherein R^{1b} and R^{2b} independently represent hydrogen, propyl, butyl, lower alkenyl or lower alkynyl; R^{3b} represents hydrogen or lower alkyl; Z^b represents substituted or unsubstituted naphthyl, or formula (I-ii)



(I-ii)

(in which R^6 and m have the same meanings as defined above, respectively); and Y^1 and Y^2 have the same meanings as defined above, respectively], or a pharmaceutically acceptable salt thereof.

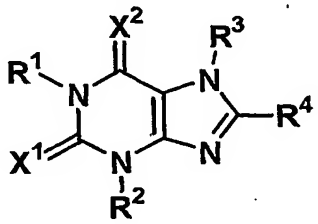
23. The method of treating an anxiety disorder according to claim 20 wherein the xanthine derivative is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine.

24. The method of treating an anxiety disorder according to any one of claims 20 to 23, wherein the anxiety disorder is generalized anxiety disorder.

25. A method of treating an anxiety disorder, comprising administering an effective amount of at least one adenosine A_{2A} receptor antagonist in combination with an anxiolytic other than the adenosine A_{2A} receptor antagonist to a patient in need thereof.

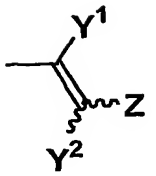
26. The method of treating an anxiety disorder according to claim 25 wherein the adenosine adenosine A_{2A} receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.

27. The method of treating an anxiety disorder according to claim 25 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I):



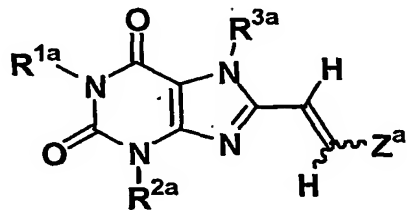
(I)

[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)

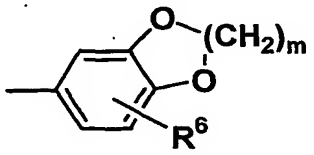

(I-i)

(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof.

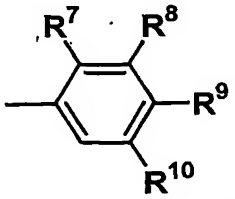
28. The method of treating an anxiety disorder according to claim 25 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I-A):


(I-A)

[wherein R^{1a} and R^{2a} independently represent methyl or ethyl; R^{3a} represents hydrogen or lower alkyl; and Z^a represents formula (I-ii)

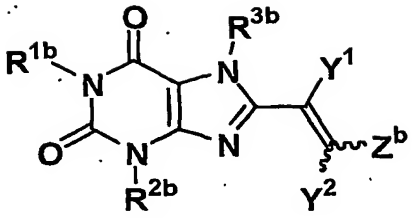

(I-ii)

(in which R^6 represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3) or formula (I-iii)


(I-iii)

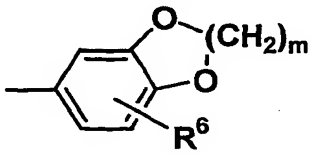
(in which at least one of R^7, R^8 and R^9 represents lower alkyl or lower alkoxy and the others represent hydrogen; R^{10} represents hydrogen or lower alkyl)], or a pharmaceutically acceptable salt thereof.

29. The method of treating an anxiety disorder according to claim 25 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I-B):



(I-B)

[wherein R^{1b} and R^{2b} independently represent hydrogen, propyl, butyl, lower alkenyl or lower alkynyl; R^{3b} represents hydrogen or lower alkyl; Z^b represents substituted or unsubstituted naphthyl, or formula (I-ii)



(I-ii)

(in which R^6 and m have the same meanings as defined above, respectively); and Y^1 and Y^2 have the same meanings as defined above, respectively], or a pharmaceutically acceptable salt thereof.

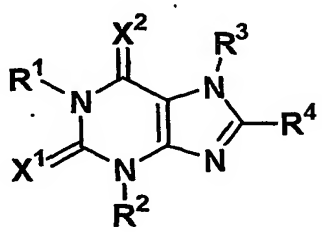
30. The method of treating an anxiety disorder according to claim 25 wherein the adenosine A_{2A} receptor antagonist is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine.

31. The method of treating an anxiety disorder according to any one of claims 25 to 30, wherein the anxiety disorder is panic disorder, agoraphobia, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder, generalized anxiety disorder or specific phobia.

32. A composition comprising an adenosine A_{2A} receptor antagonist and an anxiolytic other than the adenosine A_{2A} receptor antagonist.

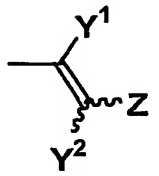
33. The composition according to claim 32 wherein the adenosine adenosine A_{2A} receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.

34. The composition according to claim 32 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I):



(I)

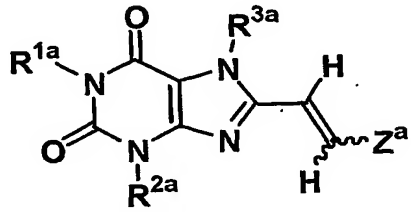
[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

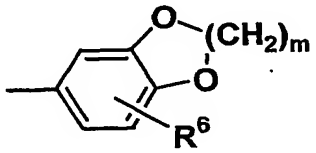
(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof.

35. The composition according to claim 32 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I-A):



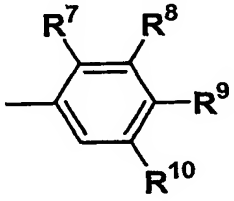
(I-A)

[wherein R^{1a} and R^{2a} independently represent methyl or ethyl; R^{3a} represents hydrogen or lower alkyl; and Z^a represents formula (I-ii)



(I-ii)

(in which R^6 represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3) or formula (I-iii)

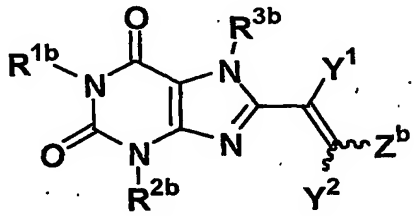


(I-iii)

(in which at least one of R^7, R^8 and R^9 represents lower alkyl or lower alkoxy and the others represent hydrogen; R^{10}

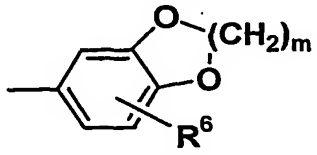
represents hydrogen or lower alkyl)], or a pharmaceutically acceptable salt thereof.

36. The composition according to claim 32 wherein the adenosine A_{2A} receptor antagonist is a compound represented by formula (I-B):



(I-B)

[wherein R^{1b} and R^{2b} independently represent hydrogen, propyl, butyl, lower alkenyl or lower alkynyl; R^{3b} represents hydrogen or lower alkyl; Z^b represents substituted or unsubstituted naphthyl, or formula (I-ii)



(I-ii)

(in which R^6 and m have the same meanings as defined above, respectively); and Y^1 and Y^2 have the same meanings as defined above, respectively], or a pharmaceutically acceptable salt thereof.

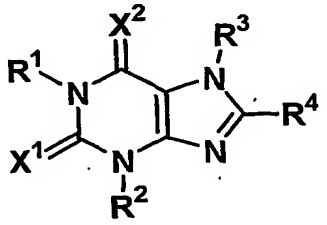
37. The composition according to claim 32 wherein the adenosine A_{2A} receptor antagonist is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine, or a pharmaceutically acceptable salt thereof.

38. The method of treating an anxiety disorder according to claim 1 wherein the adenosine A_{2A} receptor antagonist is a triazolopyrimidine derivative or a pharmaceutically acceptable salt thereof.

39. An agent for treating an anxiety disorder selected from the group consisting of panic disorder, agoraphobia, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder, and specific phobia, comprising a compound having adenosine A_{2A} receptor antagonistic activity or a pharmaceutically acceptable salt thereof as an active ingredient.

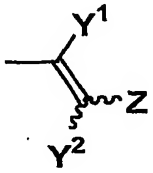
40. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a xanthine derivative or a pharmaceutically acceptable salt thereof.

41. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (I):



(I)

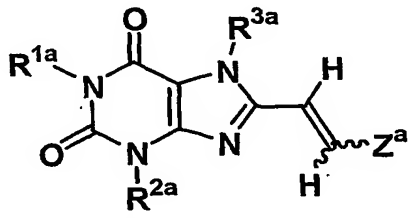
[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

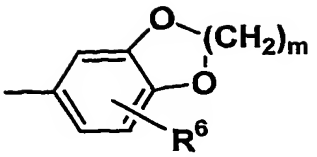
(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof.

42. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (I-A):



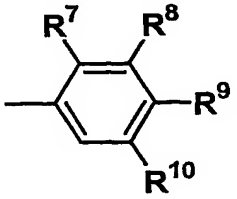
(I-A)

[wherein R^{1a} and R^{2a} independently represent methyl or ethyl; R^{3a} represents hydrogen or lower alkyl; and Z^a represents formula (I-ii)



(I-ii)

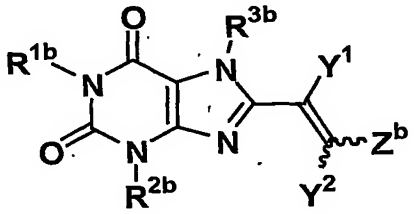
(in which R^6 represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3) or formula (I-iii)



(I-iii)

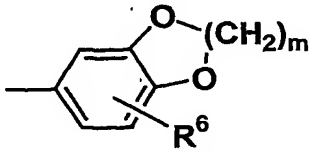
(in which at least one of R^7, R^8 and R^9 represents lower alkyl or lower alkoxy and the others represent hydrogen; R^{10} represents hydrogen or lower alkyl)], or a pharmaceutically acceptable salt thereof.

43. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (I-B):



(I-B)

[wherein R^{1b} and R^{2b} independently represent hydrogen, propyl, butyl, lower alkenyl or lower alkynyl; R^{3b} represents hydrogen or lower alkyl; Z^b represents substituted or unsubstituted naphthyl, or formula (I-ii)



(I-ii)

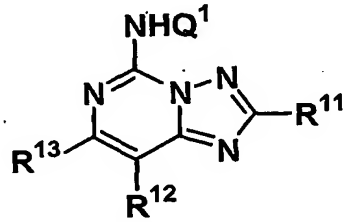
(in which R^6 and m have the same meanings as defined above, respectively); and Y^1 and Y^2 have the same meanings as defined above, respectively], or a pharmaceutically acceptable salt thereof.

44. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is (E)-8-(3,4-

dimethoxystyryl)-1,3-diethyl-7-methylxanthine or a pharmaceutically acceptable salt thereof.

45. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a triazolopyrimidine derivative or a pharmaceutically acceptable salt thereof.

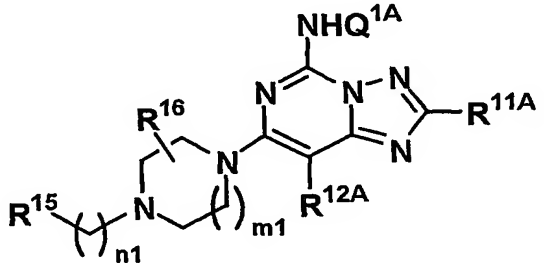
46. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (II):



(II)

[wherein R^{11} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; R^{12} represents hydrogen, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; R^{13} represents hydrogen, halogen or $-WR^{14}$ (in which W represents -O- or -S-; and R^{14} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and Q^1 represents hydrogen or 3,4-dimethoxybenzyl], or a pharmaceutically acceptable salt thereof.

47. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (III):

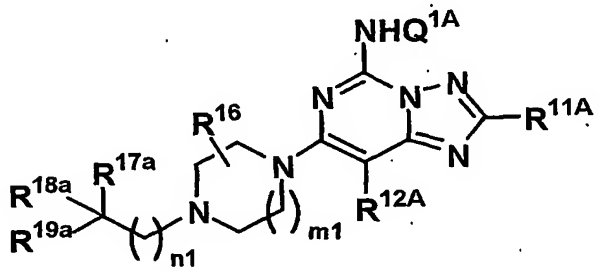


(III)

[wherein R^{11A} represents substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl; R^{12A} represents hydrogen, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or substituted or

unsubstituted heteroaryl; m1 and n1 are independently an integer of 0 to 4; Q^{1A} represents hydrogen or 3,4-dimethoxybenzyl; R^{15} represents hydrogen, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyalic group, or $-CR^{17}R^{18}R^{19}$ (in which R^{17}, R^{18} and R^{19} independently represent hydrogen, hydroxy, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyalic group; or R^{18} and R^{19} are combined together with an adjacent carbon atom to form a substituted or unsubstituted carbon ring); and R^{16} represents hydrogen, halogen, hydroxy, or substituted or unsubstituted lower alkyl], or a pharmaceutically acceptable salt thereof.

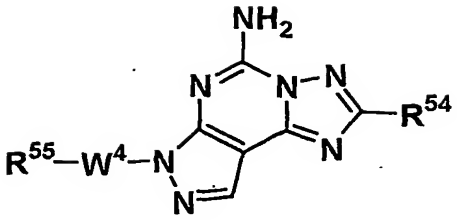
48. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (III-A):



(III-A)

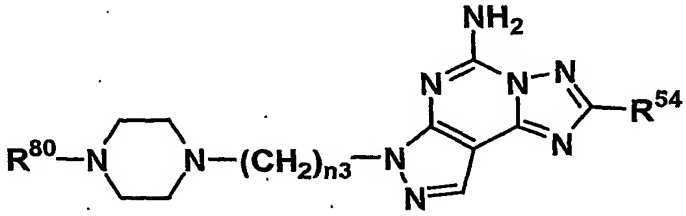
(wherein Q^{1A}, R^{11A}, R^{12A}, R^{16}, m1 and n1 have the same meanings as defined above, respectively; R^{17a} represents hydroxy, hydroxyl-substituted lower alkyl, substituted or unsubstituted lower alkoxy, or imidazo[1,2-a]pyridyl; and R^{18a} and R^{19a} independently represent hydrogen, substituted or unsubstituted lower alkyl, or substituted or unsubstituted aryl; or R^{18a} and R^{19a} are combined together with an adjacent carbon atom to form a substituted or unsubstituted carbon ring), or a pharmaceutically acceptable salt thereof.

49. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XII):


(XII)

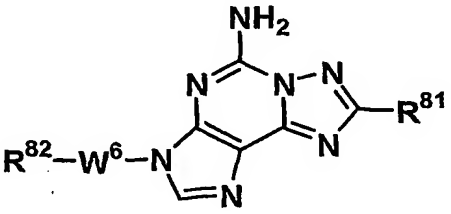
(wherein R^{54} represents substituted or unsubstituted aryl, substituted or unsubstituted cycloalkenyl, or substituted or unsubstituted heteroaryl; W^4 represents a single bond or -C(=O)-; and R^{55} represents substituted or unsubstituted lower alkyl), or a pharmaceutically acceptable salt thereof.

50. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XII-A):


(XII-A)

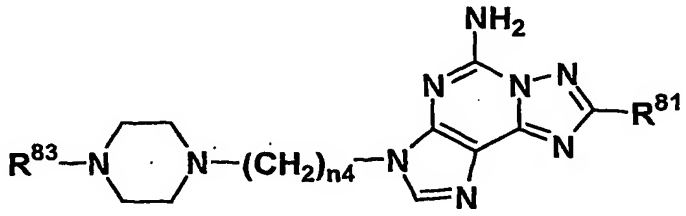
(wherein R^{54} has the same meaning as defined above; n3 is an integer of 1 to 4; and R^{80} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or a pharmaceutically acceptable salt thereof.

51. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XVIII):


(XVIII)

(wherein R^{81} represents substituted or unsubstituted aryl, substituted or unsubstituted cycloalkenyl, or substituted or unsubstituted heteroaryl; W^6 represents a single bond or -C(=O)-; and R^{82} represents substituted or unsubstituted lower alkyl), or a pharmaceutically acceptable salt thereof.

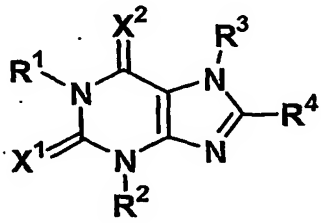
52. The agent for treating an anxiety disorder according to claim 39 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XVIII-A):



(XVIII-A)

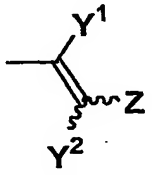
(wherein R^{81} has the same meaning as defined above; n4 is an integer of 1 to 4; and R^{83} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or a pharmaceutically acceptable salt thereof.

53. An agent for treating an anxiety disorder, comprising a xanthine derivative represented by formula (I):



(I)

[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

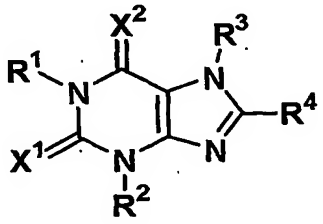
(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof as an active ingredient.

54. Use of a compound having adenosine A_{2A} receptor antagonistic activity or a pharmaceutically acceptable salt

thereof for the manufacture of an agent for treating an anxiety disorder selected from the group consisting of panic disorder, agoraphobia, obsessive-compulsive disorder, social phobia, post-traumatic stress disorder, and specific phobia.

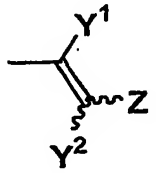
55. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a xanthine derivative or a pharmaceutically acceptable salt thereof.

56. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (I):



(I)

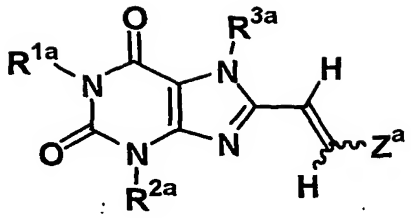
[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

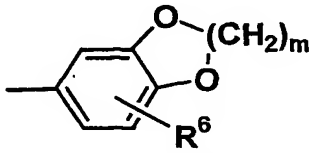
(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof.

57. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (I-A):



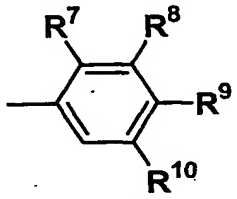
(I-A)

[wherein R^{1a} and R^{2a} independently represent methyl or ethyl; R^{3a} represents hydrogen or lower alkyl; and Z^a represents formula (I-ii)



(I-ii)

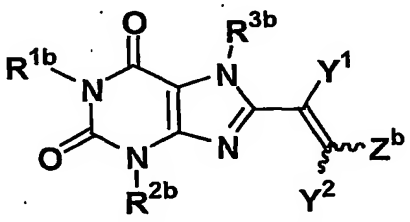
(in which R^6 represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3) or formula (I-iii)



(I-iii)

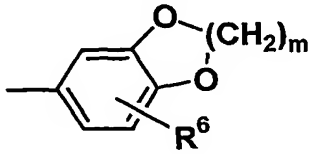
(in which at least one of R^7, R^8 and R^9 represents lower alkyl or lower alkoxy and the others represent hydrogen; R^{10} represents hydrogen or lower alkyl)], or a pharmaceutically acceptable salt thereof.

58. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (I-B):



(I-B)

[wherein R^{1b} and R^{2b} independently represent hydrogen, propyl, butyl, lower alkenyl or lower alkynyl; R^{3b} represents hydrogen or lower alkyl; Z^b represents substituted or unsubstituted naphthyl, or formula (I-ii)



(I-ii)

(in which R^6 and m have the same meanings as defined above, respectively); and Y^1 and Y^2 have the same meanings as defined above, respectively], or a pharmaceutically acceptable salt thereof.

59. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine or a pharmaceutically acceptable salt thereof.

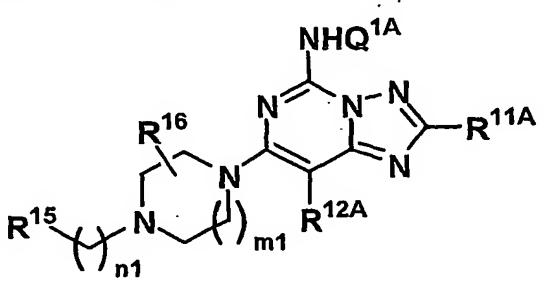
60. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a triazolopyrimidine derivative or a pharmaceutically acceptable salt thereof.

61. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (II):

(II)

[wherein R^{11} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; R^{12} represents hydrogen, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; R^{13} represents hydrogen, halogen or $-WR^{14}$ (in which W represents -O- or -S-; and R^{14} represents substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and Q^1 represents hydrogen or 3,4-dimethoxybenzyl], or a pharmaceutically acceptable salt thereof.

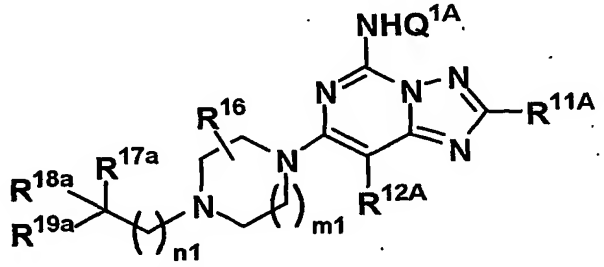
62. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (III):



(III)

[wherein R^{11A} represents substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl; R^{12A} represents hydrogen, halogen, substituted or unsubstituted lower alkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl; m1 and n1 are independently an integer of 0 to 4; Q^{1A} represents hydrogen or 3,4-dimethoxybenzyl; R^{15} represents hydrogen, substituted or unsubstituted aryl, a substituted or unsubstituted heterocyalic group, or $-CR^{17}R^{18}R^{19}$ (in which R^{17}, R^{18} and R^{19} independently represent hydrogen, hydroxy, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyalic group; or R^{18} and R^{19} are combined together with an adjacent carbon atom to form a substituted or unsubstituted carbon ring); and R^{16} represents hydrogen, halogen, hydroxy, or substituted or unsubstituted lower alkyl], or a pharmaceutically acceptable salt thereof.

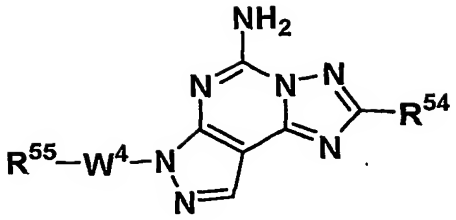
63. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (III-A):



(III-A)

(wherein Q^{1A}, R^{11A}, R^{12A}, R^{16}, m1 and n1 have the same meanings as defined above, respectively; R^{17a} represents hydroxy, hydroxyl-substituted lower alkyl, substituted or unsubstituted lower alkoxy, or imidazo[1,2-a]pyridyl; and R^{18a} and R^{19a} independently represent hydrogen, substituted or unsubstituted lower alkyl, or substituted or unsubstituted aryl; or R^{18a} and R^{19a} are combined together with an adjacent carbon atom to form a substituted or unsubstituted carbon ring), or a pharmaceutically acceptable salt thereof.

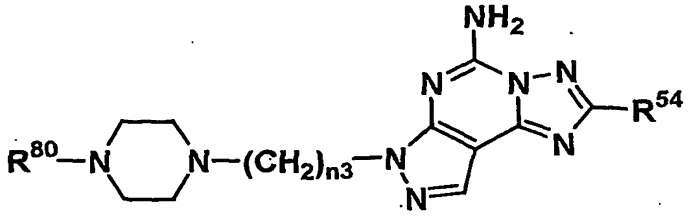
64. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XII):



(XII)

(wherein R^{54} represents substituted or unsubstituted aryl, substituted or unsubstituted cycloalkenyl, or substituted or unsubstituted heteroaryl; W^4 represents a single bond or -C(=O)-; and R^{55} represents substituted or unsubstituted lower alkyl), or a pharmaceutically acceptable salt thereof.

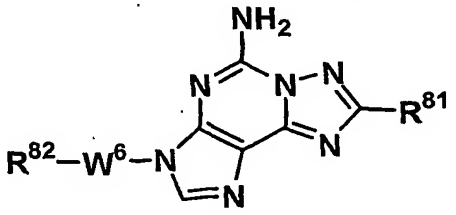
65. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XII-A):



(XII-A)

(wherein R^{54} has the same meaning as defined above; n3 is an integer of 1 to 4; and R^{80} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or a pharmaceutically acceptable salt thereof.

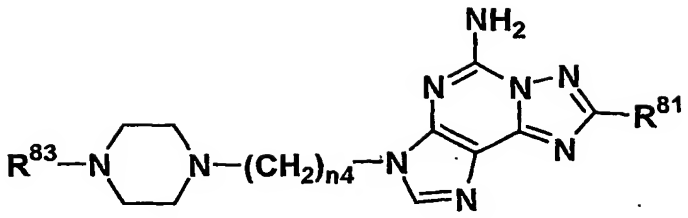
66. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XVIII):



(XVIII)

(wherein R^{81} represents substituted or unsubstituted aryl, substituted or unsubstituted cycloalkenyl, or substituted or unsubstituted heteroaryl; W^6 represents a single bond or -C(=O)-; and R^{82} represents substituted or unsubstituted lower alkyl), or a pharmaceutically acceptable salt thereof.

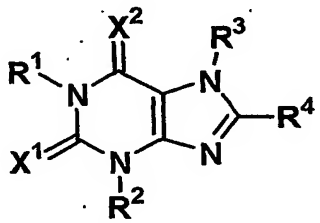
67. The use according to claim 54 wherein the compound having adenosine A_{2A} receptor antagonistic activity is a compound represented by formula (XVIII-A):



(XVIII-A)

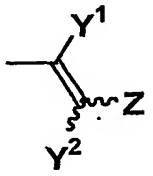
(wherein R^{81} has the same meaning as defined above; n4 is an integer of 1 to 4; and R^{83} represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group), or a pharmaceutically acceptable salt thereof.

68. Use of a xanthine derivative represented by formula (I):



(I)

[wherein R^1, R^2 and R^3 independently represent hydrogen, lower alkyl, lower alkenyl or lower alkynyl; R^4 represents cycloalkyl, $-(CH_2)_n-R^5$ (in which R^5 represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4) or formula (I-i)



(I-i)

(in which Y^1 and Y^2 independently represent hydrogen, halogen or lower alkyl; and Z represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group); and X^1 and X^2 independently represent O or S], or a pharmaceutically acceptable salt thereof for the manufacture of an agent for treating an anxiety disorder.